The Xerox 1100 Scientific Information Processor is a microprogrammed medium sized computer. The system consists of two modules: a work station and an electronic cabinet.

The work station uses a large format display, a keyboard and a pointing device called a "mouse". The electronics cabinet is small enough to be used in an office environment or it may be located remotely.

The 1100 Scientific Information Processor includes a complete implementation of the Interlisp Virtual Machine (VM) specification. All system software documented in the Interlisp Reference Manual (with the exception of those portions described as applicable to Interlisp-10 only) runs under the 1100 Processor Interlisp. Several very large and independently developed application systems, including the Mycin System for Infectious Disease Diagnosis, the KL-ONE Knowledge Representation Language, and the West Tutoring System, have been implemented on the 1100 Scientific Information Processor. The 1100 system delivers computing power comparable to that delivered by a KL-10 with a load average of approximately 1.5 when running large Interlisp AI systems, such as KL-ONE. The 1100 is currently in active use by researchers at Xerox Palo Alto Research Center and Stanford University.

The 1100 system is written almost entirely in LISP. All of this code is accessible, which allows a systems-oriented user to provide a wide variety of non-standard features.
FACT SHEET

DETAILED INFORMATION

Processor
4 M words (8 M bytes) virtual address space
576 K words (1.15M bytes) main memory
≈ 200 nsec micro instruction cycle time
Rigid disk Shugart SA 4008, formatted capacity
23 M bytes
RS232C interfaces
I/O interface consisting of:
-- 8 output lines, 5 input lines
-- 8 bidirectional tristate lines
Communications interface

Display
Large format CRT display (17” diagonal)
High resolution bit map (1024 x 808 pixels)
Usable viewing area: 12.75” wide x 10” high
Refresh rate: 38.7 frames per second, interlaced
Distance from processor: up to 250 feet

Keyboard
64 unencoded keys

Pointing Device
3-button mouse

Software
*Interlisp D:*
-- Direct microcode support
-- Deep binding
-- CDR encoding (in a 32-bit CONS cell)
-- Incremental, reference counted garbage collections
-- Raster scan graphics
-- Communications software

Communications
Controller, transceiver, and cable connector
will be supplied

Size
Processor
19” wide x 23” high x 28” deep
Display Unit
17” wide x 19” high x 15” deep
Keyboard
17” wide x 3.25” high x 7” deep
Pointing Device
2” wide x 1.5” high x 3.25” deep

Weight
Processor: 150 pounds
Display Unit: 40 pounds
Keyboard: 6 pounds

Power
Processor
115 V, 60 Hz, 12 amps
Display Unit
Included in processor rating

PRICE
For Processor, Display, Keyboard, Pointing
Device, and license for use of Interlisp D
Software
$59,719 per system